

Serial No. 09/986,380

January 20, 2004

Page 2

AMENDMENTS TO THE CLAIMS:

Claims 1-23 (Cancelled).

24. (New) An electronic assembly, comprising:

a radiographic sensor device having a first surface that detects radiation and having a plurality of connector pins arranged in a grid extending from a second surface opposite said first surface;

a circuit board having a plurality of connector pin sockets on one side thereof that connect with said connector pin grid, and having a thermal channel aperture therethrough;

a heat sink located on a second side of said circuit board opposite said one side; and

a thermal channel device having a contact portion and an extending portion, said contact portion having a first surface making contact with said second surface of said radiographic sensor device and having a second surface, opposite said first surface, making contact with said circuit board so as to provide a predetermined spaced-apart relationship between said radiographic sensor device and said circuit board, said contact portion being accommodated within a periphery of said connector pin grid, said extending portion extending from said contact portion through said thermal channel aperture and making thermal contact with said heat sink.

25. (New) The electronic assembly of claim 24, further comprising a compressible thermal gasket positioned between said thermal channel device and said heat sink.

26. (New) The electronic assembly of claim 24, wherein said contact portion includes a retaining stud and said circuit board includes a retaining stud aperture that receives said retaining stud.

Serial No. 09/986,380

January 20, 2004

Page 3

27. (New) The electronic assembly of claim 24, wherein said contact portion comprises three elongate members extending substantially radially from said extending portion of said thermal device.

28. (New) The electronic assembly of claim 24, wherein said extending portion is substantially cylindrical and includes a threaded outer surface portion that receives a threaded fastener that removably affixes said thermal channel device to said circuit board.

29. (New) The electronic assembly of claim 24, wherein said extending portion includes an aperture that receives a fastener which removably affixes said thermal channel device to said heat sink.

30. (New) The electronic assembly of claim 24, wherein said thermal channel device has a different coefficient of thermal conductivity than said heat sink.

31. (New) An electronic assembly, comprising:

- a radiographic sensor device having a first surface that detects radiation and having a second surface opposite said first surface;

- a circuit board that electrically connects with said radiographic sensor device at one side thereof, and having a thermal channel aperture therethrough;

- a heat sink located on a second side of said circuit board opposite said one side;
- and

- a thermal channel device having a contact portion and an extending portion, said contact portion having a first surface making contact with said second surface of said radiographic sensor device and having a second surface, opposite said first surface, making contact with said circuit board so as to provide a predetermined spaced-apart relationship between said radiographic sensor device and said circuit board, said extending portion extending from said contact portion through said thermal channel aperture and making thermal contact with said heat sink.

Serial No. 09/986,380

January 20, 2004

Page 4

32. (New) The electronic assembly of claim 31, further comprising a compressible thermal gasket positioned between said thermal channel device and said heat sink.

33. (New) The electronic assembly of claim 31, wherein said contact portion includes a retaining stud and said circuit board includes a retaining stud aperture that receives said retaining stud.

34. (New) The electronic assembly of claim 31, wherein said contact portion comprises three elongate members extending substantially radially from said extending portion of said thermal device.

35. (New) The electronic assembly of claim 31, wherein said extending portion is substantially cylindrical and includes a threaded outer surface portion that receives a threaded fastener that removably affixes said thermal channel device to said circuit board.

36. (New) The electronic assembly of claim 31, wherein said extending portion includes an aperture that receives a fastener which removably affixes said thermal channel device to said heat sink.

37. (New) The electronic assembly of claim 31, wherein said thermal channel device has a different coefficient of thermal conductivity than said heat sink.